

**Testimony
before the
House Committee on
Consumer Protection and Commerce
HB 2525, HD 1 -- Relating to Electricity**

**Wednesday, February 8, 2012
2:00 pm, Conference Room 325**

**By Mathew McNeff
Acting Manager, Renewable Energy Services Department
Maui Electric Company, Ltd.**

Chair Herkes, Vice-Chair Yamane, and Members of the Committee:

My name is Mathew McNeff. I am the Acting Manager of the Renewable Energy Services Department for Maui Electric Company. I am testifying on behalf of Hawaiian Electric Company and its subsidiary utilities, Maui Electric Company and Hawaii Electric Light Company. We support the intent of HB 2525, HD 1 to establish electric reliability standards to govern all segments of the electric power system

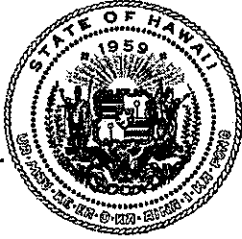
Ensuring reliability and resiliency of the electric system as we increase renewable energy levels on Hawaii's electric grids is an important aspect to successfully achieve the State's ambitious renewable energy portfolio standard mandate. It is critical for the Public Utilities Commission ("PUC") to have the clear authority to perform necessary electric system reliability and grid access oversight functions, and to allow the commission to contract for the services of a Hawaii electricity reliability administrator to support the commission in carrying out those critical functions throughout the State.

As we work toward adding significant levels of new renewable resources to the grid, it is also important that the PUC oversees and make determinations regarding any disputes that arise from the process of interconnecting an electric generator with the electric system to facilitate timely resolution and advancement of projects as quickly as possible.

We would like to offer the following general comments on the bill:

1. As currently drafted, the compliance and enforcement section applies specifically to compliance with “all adopted reliability standards”. We would suggest that the section on compliance and enforcement also apply to “interconnection requirements” (as defined in part A) as well since the bill proposes the PUC to have the authority to make final determinations regarding any disputes concerning an existing or new interconnection.
2. Though the preamble makes reference to the Federal Energy Regulatory Commission and the North American Electric Reliability Corporation, we suggest that the qualifications of the Hawaii Electricity Reliability Administrator (“HERA”) include the skills and expertise necessary to understand the unique nature of Hawaii’s island grid systems in establishing recommendations to the Commission on reliability standards.
3. The PUC should have the flexibility to allow utilities to recover appropriate and reasonable costs for interconnections, including but not limited to interconnection studies and related technical and operating analysis through the Hawaii electric reliability surcharge.

We would be happy to continue to work with the PUC on clarifying language in this bill. Thank you for the opportunity to testify in support of this measure.



**DEPARTMENT OF BUSINESS,
ECONOMIC DEVELOPMENT & TOURISM**

NEIL ABERCROMBIE
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Statement of
RICHARD C. LIM
Director
Department of Business, Economic Development, and Tourism
before the
HOUSE COMMITTEE ON CONSUMER PROTECTION & COMMERCE
Wednesday, February 8, 2012
2:00 p.m.
State Capitol, Conference Room 325

in consideration of
HB2525 HD1
RELATING TO ELECTRICITY

Good afternoon Chair Coffman, Vice Chair Kawakami and Members of the Committee.

The Department of Business, Economic Development, and Tourism (DBEDT) supports HB2525 HD1 to ensure fair and transparent grid access that is critical to achieving Hawaii's transformation to clean energy. We would like to offer the following comments for the Committee's consideration.

The purpose of HB2525 HD1, Relating to Public Utilities, is three-fold: (1) to authorize the Public Utilities Commission (PUC) to perform necessary electric system reliability and grid access oversight functions; (2) to allow the PUC to contract for the services of a Hawaii electricity reliability administrator; and (3) to allow the PUC to establish a surcharge applied to "users and operators of the Hawaii electric system", for the purpose of maintaining system reliability.

Providing the PUC the authority to perform electric system reliability and grid access oversight functions also effectively confers to the PUC the responsibility for ensuring and maintaining system reliability and security as currently assumed by the electric utilities. This can serve a valuable public service. A disinterested quasi-judicial body is better suited to serve as an impartial standard-bearer on the greatest penetration of renewable energy that can reliably and safely enter the grid than a privately owned utility. This assumes the PUC will successfully secure the resources to establish the technical capacity to assume this responsibility from the utility.

We also note that the electricity reliability administrator is set up similar to the public benefits fund administrator. Unlike the public benefits fee administrator statute, HRS 269-123, HB2525 HD1 does not specify the requirements for the electricity reliability administrator who will be entrusted with the PUC's very important and significant authority and duties "to ensure the reliable design and operation of the Hawaii electric system." However, it is a reasonable expectation that the PUC's consultant can adequately prepare these essential specific requirements, responsibilities and standard operating procedures for the electricity reliability administrator as a first order of business, administratively.

Thank you for the opportunity to offer these comments.

SOLAR ENERGY INDUSTRIES ASSOCIATION

**HOUSE COMMITTEE ON CONSUMER PROTECTION & COMMERCE
TESTIMONY IN SUPPORT OF
HB 2525 RELATING TO ELECTRICITY**

Testimony of
Solar Energy Industries Association
Wednesday, February 8, 2012, 2:00 p.m.
House Conference Room 325

Chair Herkes and members of the Committee:

HB 2525 Authorizes the Public Utilities Commission to develop, adopt, and enforce reliability standards for electric systems, and to oversee electric grid access; authorizes the Public Utilities Commission to contract for the performance of related duties with a party to be designated as the Hawaii Electricity Reliability Administrator. The effective date of the bill is July 1, 2012.

The Solar Energy Industries Association, SEIA, supports HB 2525 as it would bring necessary oversight of the electricity grid and related reliability matters. Docket No. 2011-0206, commonly referred to as the Reliability Standards Working Group, or RSWG, is ongoing under the auspices of the Public Utilities Commission. The process was established to address some electric reliability matters. Nevertheless, there is widespread concern that this process will not resolve longstanding concerns over grid operability and independent oversight/management (transmission owners control the grid). We encourage the Committee to favorably vote on HB 2525.

SEIA is the national trade association of the United States solar industry. Through advocacy and education, SEIA and its 1,100 member companies work to make solar energy a mainstream and significant energy source by expanding markets, removing market barriers, strengthening the industry and educating the public on the benefits of solar energy.



Sierra Club Hawai'i Chapter

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HOUSE COMMITTEE ON CONSUMER PROTECTION & COMMERCE

February 8, 2012, 2:00 P.M.

(Testimony is 1 page long)

TESTIMONY IN SUPPORT OF HB 2525 (HD1)

Aloha Chair Herkes and Committee Members -

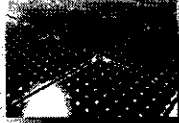
The Sierra Club, Hawai'i Chapter, with over 9,000 members and supporters, *supports* HB 2525 (HD1). This bill would, among other things, allow the Public Utilities Commission to develop grid reliability and interconnection standards.

One of the biggest stumbling blocks towards transitioning to distributed generation has been the resistance of utilities to allow distributed power to connect to the grid. For example, a year ago HEI imposed a moratorium on additional distributed power in Maui because of purported concerns about grid stability. It was only after a group of environmental organizations and solar companies protested did HEI change its position.

HEI over utilizes the concern of grid instability as a justification to hold up rapid deployment of distributed power. While in some circumstances grid stability may be a legitimate concern, it's difficult to take these statements at face value when the utility has a conflict of interest. They are direct competitors to any distributed power source.

This measure has the potential to create an objective board to address the amount of renewable power that can or cannot come onto the grid. By taking this responsibility away from the utility, we can obtain some assurance that these numbers will be based in science and not corporate self-interest.

We respectfully ask for the Committees to move this bill forward. Mahalo for the opportunity to testify.



HOUSE COMMITTEE ON CONSUMER PROTECTION & COMMERCE

February 8, 2012, 2:00 P.M.

Room 325

(Testimony is 4 pages long)

TESTIMONY IN STRONG SUPPORT OF HB 2525 HD1

Chair Herkes and members of the Committee:

The Blue Planet Foundation strongly supports HB 2525 HD1, a measure which authorizes the Public Utilities Commission (PUC) to perform necessary electric system reliability and grid access oversight functions and to allow the commission to contract for the services of a Hawaii Electricity Reliability Administrator (HERA) to support the commission in carrying out those critical functions throughout the State.

Rationale

Blue Planet views establishment of the HERA as a keystone clean energy legislation to enable more accessible, fair, transparent, and predictable grid interconnection for renewable energy generators while maintaining reliable system operations for the grid. Adoption of this policy will provide quasi-independent oversight of grid interconnection and operations to ensure that the utility is doing everything it can to reliably maximize the amount of renewable energy Hawaii uses.

Numerous technical, operational, and regulatory issues concerning Hawaii's century-old electrical system are stifling the full potential of renewable energy production. The proposed policy in HB 2525 HD1 can help clear the path by proposing a separate entity within the PUC to oversee grid interconnection and reliability. HERA would open the doors to greater integration of renewables while establishing formal, objective, and verifiable reliability and interconnection standards for Hawaii's electricity grids. Clear regulatory oversight of the state's grids would ensure system reliability, resiliency, and accountability.

Jeff Mikulina, executive director • jeff@blueplanetfoundation.org

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What are reliability standards?

Blue Planet believes that all generators of electricity who plug into the various island electricity grids should be governed by formal electric system reliability standards similar to those promulgated by the North American Electric Reliability Corporation (NERC). Although Federal Power Act provisions concerning electric reliability standards do not apply in Hawaii, electric utility companies electric system planning and operations, including decisions concerning the interconnection and curtailment of renewable energy providers, should be governed by formal reliability standards.

Reliability standards are planning and operating rules that utilities follow to ensure system reliability. These standards are typically developed using a stakeholder-driven process similar to the current Reliability Standards Working Group. On the mainland, once the standards are approved by the U.S. Federal Energy Regulatory Commission (FERC), NERC reliability standards become legally binding on all owners, operators and users of the bulk power system. NERC has the legal authority to enforce compliance with NERC reliability standards, which it achieves in part through the imposition of financial penalties.

Successful models elsewhere

The experience of New Zealand demonstrates that formal reliability standards are appropriate and utilized not only in North America, but on isolated island electric grids similar to those in Hawaii. The electric system in New Zealand consists of two separate island grids with limited interconnection via a high voltage direct current undersea cable. The bulk power electric system is subject to formal reliability standards established by the New Zealand Electricity Commission¹. These New Zealand standards are comparable to NERC reliability standards governing North America.

For example, under New Zealand reliability standards, "Principal Performance Obligations," or PPOs, establish real-time reliability standards (i.e., system frequency and voltage control) the bulk electric system operator must comply with to ensure reliable operation of generation and transmission². Similarly, grid reliability standards set forth the requirements for the design and upgrade of the high voltage transmission system; these requirements are analogous to NERC reliability standards related to transmission planning³. The grid system operator is also required

¹ Available at www.electricitycommission.govt.nz/opdev/transmis/gridreliability/index.html#grs

² Available at www.electricitycommission.govt.nz/pdfs/rulesandregs/rules/rulespdfypartC-20Jul09.pdf

³ Available at www.electricitycommission.govt.nz/opdev/transmis/gridreliability/index.html#grs.

to submit monthly system performance reports to the Electricity Commission. The reports must summarize power system performance, including compliance with system frequency PPOs⁴.

Formal reliability standards similar to the NERC reliability standards are appropriate to guide Hawaii's transition to electric grids supplied by increasing amounts of renewable energy. Grid reliability has emerged as a critical issue in the addition of greater amounts of variable energy resources (solar, wind, etc.) to Hawaii's grid. Addressing the various technical impacts of increasing amounts of variable renewable energy on the electric grids demands formal reliability standards and operating practices tailored for Hawaii. Formal reliability standards (such as the NERC standards) may be particularly valuable in Hawaii because they provide an objective basis to assess any grid reliability impacts and ensure reliable grid operation.

Funding

House Bill 2525 HD1 contemplates establishing a surcharge to fund the reliability standards and the HERA. Blue Planet supports this surcharge but we note that a surcharge could be avoided by simply appropriating a greater share of the PUC special fund to the PUC.

Currently, the PUC is funded through the PUC special fund which collects funding from various sources, most significantly an annual fee of one-half of one per cent of the gross income of the public utility's previous year's business. About half of the revenue in this special fund—which receives approximately \$17 million to \$18 million annually—is diverted to the state's general fund, however. The PUC is currently deliberating dockets that will fundamentally reshape Hawaii's electric utility sector. Smart grid, reliability standards, on-bill financing, integrated resource planning—these dockets require thorough deliberation, research, and expert input. The PUC must have the talent and resources to adequately investigate and develop the right policies for Hawaii's 21st century electricity industry. The total funding available to them through their revenues should be available for their work.

The public utilities commission needs funding to navigate the multi-billion dollar transition to Hawaii's clean energy economy. Adoption of formal reliability and interconnection standards and HERA is a necessary additional expense. Appropriating the full amount of the PUC special fund to the PUC for the purposes of this important new role is a possible sensible solution to avoid an additional surcharge.

⁴ Available at www.systemoperator.co.n2/fl947.26087875/so-system-perf-repon-dec-09.pdf

Achieving the preferred system of energy self-sufficiency for Hawaii—one where wind and solar are no longer considered “alternative” energy—requires restructuring established paradigms in electricity production and distribution. An effective first step is replacing utility control of grid access with control by a neutral entity tasked with establishing reliability and interconnection rules that encourage clean energy development in all appropriate forms. Such a third-party oversight model for grid access has succeeded elsewhere in democratizing power production.

Thank you for the opportunity to testify.

Testimony for HB2525 on 2/8/2012 2:00:00 PM

mailinglist@capitol.hawaii.gov [mailinglist@capitol.hawaii.gov]

Sent: Tuesday, February 07, 2012 11:03 PM

To: CPCtestimony

Cc: jkealoha@ilwulocal142.org

Attachments: 2012HB2525.docx (14 KB)

Testimony for CPC 2/8/2012 2:00:00 PM HB2525

Conference room: 325

Testifier position: Support

Testifier will be present: No

Submitted by: Joanne Kealoha

Organization: ILWU Local 142

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Submitted on: 2/7/2012

Comments:

The Twenty-Sixth Legislature
Regular Session of 2012

HOUSE OF REPRESENTATIVES
Committee on Consumer Protection & Commerce
Rep. Robert N. Herkes, Chair
Rep. Ryan I. Yamane, Vice Chair
State Capitol, Conference Room 325
Wednesday, February 8, 2012; 2:00 p.m.

**STATEMENT OF THE ILWU LOCAL 142 ON H.B. 2525, HD1
RELATING TO ELECTRICITY**

The ILWU Local 142 supports H.B. 2525, HD1, which authorizes the Public Utilities Commission to develop, adopt and enforce reliability standards for electric systems and to oversee electric grid access and authorizes the PUC to contract for the performance of related duties with a party to be designated as the Hawaii Electricity Reliability Administrator.

H.B. 2525, HD1 appears to provide enabling legislation to allow the PUC to oversee access to the electricity grid statewide and to ensure reliability of service. With the abundance of renewable energy resources available in the State, there must be a mechanism to transmit the electricity generated from one area to another and ensure consistent availability. Through the oversight provided by the PUC, and the renewable sources energy being actively developed, Hawaii will be able to achieve its goal of having 40% of its electricity needs met by renewable sources by 2030 but must be assured of reliability.

The ILWU urges passage of H.B. 2525, HD1. Thank you for the opportunity to testify.



Hawaii Solar Energy Association
Serving Hawaii Since 1977

February 8, 2012
2:00 PM

House
**COMMITTEE ON CONSUMER
PROTECTION AND COMMERCE**
HB 2525 HD 1

Mark Duda
President

TESTIMONY IN SUPPORT

Aloha Chair Herkes, Vice-Chair Yamane, and Members of the Committee:

HSEA supports the proposal in HB2525 HD1 of allowing the PUC to develop and administer reliability standards for the state's utility grids. HSEA's members have substantial direct exposure to the issue of grid reliability through their work with the state's utility customers and investors in distributed generating systems. HSEA also intervenes in a number of PUC dockets that directly or indirectly deal with the issue of utility grid reliability.

Based on this participation, HSEA believes that the existing process for developing and implementing reliability standards is unworkable. The process does not involve sufficient expert involvement and is proceeding at an almost unimaginably slow pace due to the unwieldiness of the group and its inability to obtain even the most basic information about the operation of the grids of the relevant utilities. Shifting the process under the direct control of the PUC and giving them the funding to hire the requisite expertise will likely shorten the timeline and improve the result.

Thank you for the opportunity to testify on this measure.

Mark Duda
President, Hawaii Solar Energy Association

About Hawaii Solar Energy Association

Hawaii Solar Energy Association (HSEA) is comprised of installers, distributors, manufacturers and financers of solar energy systems, both hot water and PV, most of which are Hawaii based, owned and operated. Our primary goals are: (1) to further solar energy and related arts, sciences and technologies with concern for the ecologic, social and economic fabric of the area; (2) to encourage the widespread utilization of solar equipment as a means of lowering the cost of energy to the American public, to help stabilize our economy, to develop independence from fossil fuel and thereby reduce carbon emissions that contribute to climate change; (3) to establish, foster and advance the usefulness of the members, and their various products and services related to the economic applications of the conversion of solar energy for various useful purposes; and (4) to cooperate in, and contribute toward, the enhancement of widespread understanding of the various applications of solar energy conversion in order to increase their usefulness to society.